

ATTACHMENT J03

Detroit Arsenal Wastewater Utility System

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J03 Detroit Arsenal Wastewater Utility System

J03.1 Detroit Arsenal Overview

J03.1.1 General Statistics

Established in 1940, Detroit Arsenal is home to the U. S. Army Tank-Automotive & Armament Command (TACOM) and the Tank-Automotive Research, Development and Engineering Center (TARDEC). Located adjacent to the community of Warren, Michigan, approximately 12 miles northeast of downtown Detroit, the Arsenal is a compact military post presently consisting of approximately 20 buildings situated on about 163 acres. Detroit Arsenal's 400 military and 5,700 civilian personnel and facilities support various acquisition, research, development and testing activities which assure acceptable equipment and technologies for U.S. Army personnel.

J03.1.2 History and Development

In 1940, the U.S. Government built the tank arsenal to support the allied war effort during World War II. The tank-automotive management was moved to the Arsenal shortly thereafter. Over the years, both Chrysler and General Dynamics have operated the Detroit Army Tank Plant (DATP) and together produced over 44,000 vehicles. In 1967, the Arsenal was renamed U.S. Army Tank-Automotive Command (TACOM) and gained control over nearly all of the Army's tank-automotive systems. The DATP itself closed in the 1990s but the management of TACOM thrives with an ever-expanding mission.

Detroit Arsenal's physical plant was reduced significantly, by the Base Realignment and Closure (BRAC) which commenced in 1995. A significant portion of the Arsenal's original 300 plus acres as well as the DATP were transferred to the City of Warren Reuse Authority (CWRA) in 1999. The reconfigured Installation now consists of headquarters buildings, manufacturing research and testing laboratories, logistics offices, and various technological support facilities located the remaining 163 acres. Although the portion of the Arsenal east of the railroad tracks was conveyed under the BRAC action, the Arsenal retained two buildings on the east side of the tracks, including a laboratory for batteries and tire research.

J03.1.3 Satellite Locations

There are no off-site installations / facilities included in this privatization action.

J03.2 Wastewater Utility System Description

J03.2.1 Wastewater Utility System Fixed Equipment Inventory

The Detroit Arsenal wastewater system consists of all appurtenances physically connected to the wastewater collection system as defined by the points of demarcation beginning at the end-use facility and ending at the connection to the City of Warren's wastewater system. The system may

include, but is not limited to, pipelines, manholes, lift stations, valves, controls, and meters (though there are no wastewater meters currently in use). The actual inventory of items sold will be conveyed to the Contractor using the Bill of Sale at the time the system is transferred.

The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the wastewater utility system. The description and inventory were developed based on best available, yet imperfect, record data. When not specifically identified by system drawings, the type and size of the components were estimated, generally based on the size of the piping the component was fastened to. Additionally, when the year of construction was not known, it was estimated based on the age of adjacent piping or the approximate age of the facility served.

The Offeror shall base its proposal on site inspections, information in the technical library, and other pertinent information, as well as the following description and inventory. As described in Paragraph C11.1, if after award the Offeror identifies additional inventory not listed in Paragraph J03.2.1.4, the Offeror may submit to the Contracting Officer a request for an equitable adjustment. If the Offeror determines that the inventory listed in Paragraph J03.2.1.4 is overstated, the Offeror shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment. The intent here is not to encourage piecemeal adjustments, but rather address significant bearing on capital replacement investment.

J03.2.1.1 System Description

The wastewater utility system at the Installation consists of collection piping and manholes. There are no treatment facilities or lift stations associated with the Arsenal's wastewater utility system. Treatment and disposal of the wastewater collected is provided by the City of Warren. Wastewater flows into the City of Warren's system at two locations. The wastewater collected from the southern portion of the Arsenal enters the City's 16-inch main along Eleven Mile Road. The wastewater from the remainder of the Arsenal flows into the City's 24-inch sewer main along Mound Road.

J03.2.1.2 Points of Demarcation

The point of demarcation is defined as the point on the wastewater collection pipe where ownership changes from the Grantee to the building owner. During the operation and maintenance transition period, concurrence on specific demarcation points will be documented during the joint inventory of facilities.

TABLE 1

Points of Demarcation

Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Point of Demarcation	Applicable Scenario	Sketch
Point where the service line enters the structure.	Sewer system flow meter is located on the service line entering the structure.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Service Line' enters the structure from the right. On this line, there is a circular symbol with two vertical lines through it, labeled 'Flow Meter'. An arrow points from the text 'Point of Demarcation' to this flow meter. Above the structure, a line labeled 'Sewer System' has an arrow pointing right. Below the structure, another line labeled 'Sewer System' has an arrow pointing right.</p>
Point of demarcation is the cleanout device if within 10' of the building perimeter.	No flow meter exists and a sewer system cleanout is located within 10 feet of the building perimeter on the service line.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Service Line' enters the structure from the right. On this line, there is a circular symbol with a cross inside, labeled 'Pipe Cleanout'. An arrow points from the text 'Point of Demarcation' to this cleanout. Above the structure, a line labeled 'Sewer System' has an arrow pointing right. Below the structure, another line labeled 'Sewer System' has an arrow pointing right.</p>
Point where the service line enters the structure <i>Note: A new cleanout device should be installed within 10' of building during any stoppage or maintenance action. This will then become the new point of demarcation.</i>	No flow meter or cleanout exists on the service line entering the structure.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Service Line' enters the structure from the right. An arrow points from the text 'Point of Demarcation' to the point where the service line enters the structure. Above the structure, a line labeled 'Sewer System' has an arrow pointing right. Below the structure, another line labeled 'Sewer System' has an arrow pointing right.</p>

J03.2.1.3 Condition Assessment

As detailed in Section J03.2.1.4, the Arsenal's wastewater utility system is not new. The general condition of the system is commensurate with an underground wastewater utility system of this age.

J03.2.1.4 Inventory

Table 2 provides a general listing of the major wastewater system fixed assets for the Arsenal's wastewater collection system included in the purchase. When not specifically identified by system drawings, the size and type of system components were estimated based on the size of the piping the component was connected to. Additionally, when the year of construction was not known, it was estimated based on the age of the piping or the age of the facility served. The system will be sold in an "as is, where is" condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned here in, is considered part of the purchased utility.

TABLE 2
Fixed Inventory
Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Item	Size	Type	Approx. Quantity	Unit	Approximate Year of Installation
Pipe	3-inch	Case Iron	81	LF	1958
	4-inch	Case Iron	614	LF	1958
	4-inch	Vitrified Clay	55	LF	Unknown
	4-inch	Unknown	418	LF	Unknown
	6-inch	Cast Iron	796	LF	1958
	6-inch	Vitrified Clay	1,532	LF	Unknown
	6-inch	Service Laterals	52	LF	Unknown
	6-inch	Unknown	1,063	LF	Unknown
	8-inch	Cast Iron	922	LF	1958
	8-inch	Vitrified Clay	3,734	LF	Unknown
	8-inch	Unknown	1,613	LF	Unknown
	10-inch	Cast Iron	1,110	LF	1958
	10-inch	Vitrified Clay	1,781	LF	Unknown
	10-inch	Unknown	2,740	LF	Unknown
	12-inch	Cast Iron	1,015	LF	1958
	12-inch	Unknown	420	LF	Unknown
	18-inch	Concrete	2,793	LF	Unknown
	48-inch	Unknown	619	LF	Unknown
	Laterals	Unknown	<u>2,007</u>	LF	Unknown
Total Pipe			23,365	LF	
Manholes			81	EA	1958

J03.2.2 Wastewater Utility System Non-Fixed Equipment and Specialized Tools

Table 3 lists other ancillary equipment (spare parts), and **Table 4** lists specialized vehicles and tools included in the purchase. Offerors shall field-verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 3

Spare Parts

Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Quantity	Item	Make/Model	Description	Remarks
None				

No spare parts for maintenance of the Arsenal wastewater utility system will be available to the new owner of the system. The Army does not maintain an inventory of spare parts for the system.

TABLE 4

Specialized Vehicles and Tools

Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Quantity	Item	Make/Model	Description	Remarks
None				

J03.2.3 Wastewater Utility System Manuals, Drawings, and Records

Table 5 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 5

Manuals, Drawings and Records

Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Quantity	Item	Description	Remarks
Available manuals, drawings, records, and reports included in the Technical Library will be transferred with the utility system.			

J03.3 Specific Service Requirements

The service requirements for the Arsenal's wastewater utility system are as defined in Paragraph C, *Description/Specifications/Work Statement*. The following requirements are specific to the wastewater utility system and are in addition to those found in Section C. If there is a conflict between requirements described below and Paragraph C, the requirements listed below take precedence over those found in Paragraph C.

J03.3.1 Excavation Marking/Digging Process

J03.3.1.1 Contractor Participation in Digging Permit Process

Contractor shall subscribe to the regional process for notification and marking of underground utilities. The Contractor shall mark all utilities in the time windows defined by this process. In some cases, where non-metallic lines do not have tracer wires, it may take longer to locate the lines. In these cases, the Contractor will make necessary notifications about a possible delay in the

marking process. Contractor shall be responsible for all repairs, costs, and damages due to excavations by others for which he did not properly mark his utilities as part of the utility marking process. Generally, utility lines will be marked with pin flags or spray paint.

J03.3.1.2 Contractor Excavation Requirements

Contractor shall notify the regional one-call dispatch center of his digging requirement. The Contractor shall also obtain digging permits from the Installation before any drilling, digging, or excavation is undertaken. Permits will identify all underground utilities within five feet of the designated area. Since utility marking is an inherently imprecise process, excavation within five feet of the marked utilities will be done by hand. Contractor shall be responsible for all repairs, costs, and damages due to his excavations that fail to comply with the DPW digging permit process and the requirements listed herein; this includes excavations extending beyond areas that have been cleared for excavation.

J03.3.2 Emergency Response

Because of the critical nature of many mission requirements, response to utility emergencies must be immediate. The Contractor will respond with a knowledgeable individual to emergency utility problems within (Insert Installation requirement) minutes of notification during duty hours and within (Insert Installation requirement) hour during non-duty hours. Additionally, repair crews must be on scene within one hour during duty hours and within two hours during non-duty hours.

J03.3.3 Restricted Access

The Contractor shall coordinate, and obtain approval for restricted area access.

J03.3.4 Crisis Situations

IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by (Insert Appropriate Agency) or equivalent agency for exercises and crisis situations. Contractor shall submit Emergency Response Plans for approval by the Government for all Exercise and Crisis situations IAW C.9.8.

J03.3.5 Cost of Supporting Utilities

Contractor shall fully cooperate with the Government with respect to energy / water conservation measures as described in Section C.3.4.

J03.4 Current Service Arrangement

As previously noted, there are no treatment facilities or lift stations associated with the Arsenal's wastewater utility system. The treatment and disposal of wastewater collected is provided by the City of Warren. The charges associated with the treatment and disposal of wastewater conveyed to the City are based on the potable water consumption.

TABLE 6

Historical Potable Water Usage and Wastewater Charges
Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Historical Potable Water Usage and Wastewater Charges		
Fiscal Year	Potable Water Usage (CCF)	Sewage Cost
FY 2001	29,648	\$ 57,295
FY 2002	23,138	\$ 48,285
FY 2003	24,014	\$ 65,050
*FY 2004	37,360	\$ 69,396

*Note: FY 2004 consists of only 10 months.

J03.5 Secondary Metering

Between the point of delivery and the end-user points of demarcation, the Contractor shall own the existing meters, and shall install additional meters at new and upgraded locations as directed by the Contracting Officer. Contractor shall install or cause to have installed utility meters as requested by the Contracting Officer in keeping with the guidance in Section C.3.3

The Installation requires secondary meters for billing of reimbursable customers, utility usage management and water conservation monitoring. The Offeror shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3, Future Secondary Meters.

J03.5.1 Existing Meters

Table 7 lists the existing (at the time of contract award) meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3.3, *Metering*, and J03.6, *Monthly Submittals*.

TABLE 7

Existing Secondary Meters
Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Facility	Building No.	Meter Number
None		

J03.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 8**. New secondary meters shall be installed IAW Paragraphs C.3.3.1, *Future Meters*, and C.13, *Operational Transition Plan*. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3.3, *Metering*, and J03.6 below.

TABLE 8

New Secondary Meters

Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Facility	Building No.
None	

J03.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

0. **Invoice.** (IAW Paragraph G.2, *Submission and Payment of Invoices*). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. The Contractor shall provide sufficient supporting documentation with each monthly invoice to substantiate all costs included in the invoice for each CLIN as approved by the Contracting officer. The proposed system of accounts shall be made available in electronic format as directed by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name:

Address:

Phone number:

0. **Outage Report.** The Contractor's monthly blockage and overflow report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name:

Address:

Phone number:

0. **Infiltration and Inflow Report:** If required by Paragraph C.3, the Contractor shall submit an Infiltration and Inflow report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

Name:

Address:

Phone number:

J03.7 Infiltration and Inflow (I&I) Projects

IAW Paragraph C.3, *Requirement*, there are currently no I&I efforts that require continuation after privatization other than the I&I report mentioned in Paragraph J03.6.

J03.8 Service Area

IAW Paragraph C.4, *Service Area*, the service area is defined as all areas within the boundaries of the Installation.

J03.9 Off-Installation Sites

As described in earlier paragraphs, there are no off-site installations / facilities included in this privatization action.

J03.10 Specific Transition Requirements

IAW Paragraph C.13, *Operational Transition Plan*, **Table 8** provides a list of service connections and disconnections required upon transfer.

TABLE 9
Service Connections and Disconnections
Wastewater Utility System - Detroit Arsenal, Warren, Michigan

Location	Description
None	

J03.11 Government Recognized System Deficiencies

Table 10 provides a list of Government recognized deficiencies. The deficiencies listed may be physical deficiencies, functional deficiencies, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. The Offeror shall make a determination as to its actual need to accomplish and the timing of any and all such deficiency remedies.

Physical and functional deficiencies may require capital to be invested in the system. If any deficiency remedy requires a capital upgrade project, the capital upgrade project shall be proposed according to the following:

- Capital upgrade projects required to bring the system to standard shall be proposed under Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Capital upgrade projects required to replace system components shall be proposed in the first years of Schedule 2 – Renewals and Replacements – 50-Year Schedule, and the cost factored into Schedule 1 – Fixed Monthly Charge, for Renewals and Replacements as part of CLIN AA.
- Transition costs shall be proposed as a one-time cost and shall be treated similar to a capital project and included in Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Improvements proposed in the operational component of the work shall be included in Schedule 1 – Fixed Monthly Charge as part of CLIN AA.

TABLE 10

System Deficiencies

Wastewater Utility System - Detroit Arsenal, Warren, Michigan

System Component	Deficiency Description
Entire Base	There are several unfunded O&M projects identified with varying degrees of development. However, nearly all of these projects fall into the category of an R&R project where systems components, having reached the end of their expected life and must be ultimately replaced. As such, these projects are not considered to be deficiencies.